

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A method comprising:

receiving a packet at a first packet forwarding device in a stack of packet forwarding devices configured to direct the packet to a destination external to the stack;

identifying an exception associated with the packet, wherein the exception includes an occurrence of represents the external destination of the packet as being unidentifiable by the paecket;

inserting a vector in the packet to indicate the identified exception; and

delivering the packet based on the inserted vector to an exception processor for processing the packet, the exception processor being shared by the packet forwarding devices in the stack, and

delivering the processed packet from the exception processor to one or more of the packet forwarding devices of the stack to direct the packet to the destination external to the stack.

2. (Previously Presented) The method of claim 1 wherein the vector includes a flag.

3. (Previously Presented) The method of claim 1 further comprising:

using the vector and a table to determine a port for sending the packet from the first device in the stack of packet forwarding devices.

4. (Original) The method of claim 1 wherein the vector includes a bit identifying the first device in the stack of packet forwarding devices.

5. (Previously Presented) The method of claim 1 further comprising:

removing the vector from the packet upon delivery of the packet to the exception processor shared by the packet forwarding devices in the stack.

6. (Original) The method of claim 1 wherein the packet is delivered over a transmission line in an aggregate of transmission lines to the exception processor shared by the packet forwarding devices in the stack.

7. (Original) The method of claim 1 wherein the vector includes bits respectively identifying the packet forwarding devices in the stack.

8. (Currently Amended) A computer program product, tangibly embodied on a computer-readable medium, the computer program product being operable to cause a machine to:

receive a packet at a first packet forwarding device in a stack of packet forwarding devices configured to direct the packet to a destination external to the stack;

identify an exception associated with the packet, wherein the exception includes an occurrence of represents the external destination of the packet as being unidentifiable by the packet;

insert a vector in the packet to indicate the identified exception; and

deliver the packet based on the inserted vector to an exception processor for processing the packet, the exception processor being shared by the packet forwarding devices in the stack, and

deliver the processed packet from the exception processor to one or more of the packet forwarding devices of the stack to direct the packet to the destination external to the stack.

9. (Previously Presented) The computer program product of claim 8 wherein the vector includes a flag.

10. (Previously Presented) The computer program product of claim 8 being further operable to cause a machine to:

use the vector and a table to determine a port for sending the packet from the first device in the stack of packet forwarding devices.

11. (Original) The computer program product of claim 8 wherein the vector includes a bit identifying the first device in the stack of packet forwarding devices.

12. (Previously Presented) A computer program product of claim 8 being further operable to cause a machine to:

remove the vector from the packet upon delivery of the packet to the exception processor shared by the packet forwarding devices in the stack.

13. (Original) The computer program product of claim 8 wherein the packet is delivered over a transmission line in an aggregate of transmission lines to the exception processor shared by the packet forwarding devices in the stack.

14. (Original) The computer program product of claim 8 wherein the vector includes bits respectively identifying the packet forwarding devices in the stack.

15. (Currently Amended) A packet forwarder comprises:

a process stored on a computer to

receive a packet at a first packet forwarding device in a stack of packet forwarding devices configured to direct the packet to a destination external to the stack;

identify an exception associated with the packet, wherein the exception includes an occurrence of represents the external destination of the packet as being unidentifiable by the packet;

insert a vector in the packet to indicate the identified exception; and

deliver the packet based on the inserted vector to an exception processor for processing the packet, the exception processor being shared by the packet forwarding devices in the stack, and

deliver the processed packet from the exception processor to one or more of the packet forwarding devices of the stack to direct the packet to the destination external to the stack.

16. (Previously Presented) The packet forwarder of claim 15 wherein the vector includes a flag.

17. (Previously Presented) The packet forwarder of claim 15 further comprising:  
a process stored on a computer to use the vector and a table to determine a port for  
sending the packet to the first device in the stack of packet forwarding devices.

18. (Currently Amended) A system comprising:  
a switch device capable of,  
receiving a packet at a first packet forwarding device in a stack of packet forwarding  
devices configured to direct the packet to a destination external to the stack;  
identifying an exception associated with the packet, wherein the exception includes an  
occurrence of represents the external destination of the packet as being unidentifiable by the  
packet;  
inserting a vector in the packet to indicate the identified exception; and  
delivering the packet based on the inserted vector to an exception processor for  
processing the packet, the exception processor being shared by the packet forwarding devices in  
the stack, and  
delivering the processed packet from the exception processor to one or more of the packet  
forwarding devices of the stack to direct the packet to the destination external to the stack.

19. (Currently Amended) The system of claim 18 wherein [[the]] the vector includes a  
flag.

20. (Previously Presented) The system of claim 18 wherein the switch device is further  
capable of:

using the vector and a table to determine a port for sending the packet from the first  
device in the stack of packet forwarding devices.

21. (Currently Amended) A packet forwarding device comprising:  
an input port for receiving a packet;  
an output port for delivering the received packet; and

a switch device capable of,

receiving a packet at a first packet forwarding device in a stack of packet forwarding devices configured to direct the packet to a destination external to the stack;

identifying an exception associated with the packet, wherein the exception includes an occurrence of represents the external destination of the packet as being unidentifiable by the packet;

inserting a vector in the packet to indicate the identified exception; and

delivering the packet based on the inserted vector to an exception processor for processing the packet, the exception processor being shared by the packet forwarding devices in the stack, and

delivering the processed packet from the exception processor to one or more of the packet forwarding devices of the stack to direct the packet to the destination external to the stack.

22. (Previously Presented) The packet forwarding device of claim 21 wherein the vector includes a flag.

23. (Previously Presented) The packet forwarding device of claim 21 wherein the switch device is further capable of:

using the vector and a table to determine a port for sending the packet from the first device in the stack of packet forwarding devices.

24. (Currently Amended) A router comprising:

a switch device capable of

receiving a packet at a first packet forwarding device in a stack of packet forwarding devices configured to direct the packet to a destination external to the stack;

identifying an exception associated with the packet, wherein the exception includes an occurrence of represents the external destination of the packet as being unidentifiable by the packet;

inserting a vector in the packet to indicate the identified exception; and

delivering the packet based on the inserted vector to an exception processor for processing the packet, the exception processor being shared by the packet forwarding devices in the stack; and

delivering the processed packet from the exception processor to one or more of the packet forwarding devices of the stack to direct the packet to the destination external to the stack.

25. (Previously Presented) The router of claim 24 wherein the vector includes an exception flag.

26. (Previously Presented) The network switch of claim 24 wherein the switch device is further capable of using the device vector and an exception routing table to determine a port for sending the packet from the first device in the stack of packet forwarding devices.